

**SEMICONDUCTOR STRUCTURE IMPLEMENTING  
SACRIFICIAL MATERIAL  
AND METHODS FOR MAKING AND IMPLEMENTING THE SAME**

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**ABSTRACT OF THE DISCLOSURE**

A semiconductor device is provided. The semiconductor device includes a substrate having transistor devices and a plurality of copper interconnect metallization lines and conductive vias. The plurality of copper interconnect metallization lines and conductive vias are defined in each of a plurality of interconnect levels of the semiconductor device such that the plurality of copper interconnect metallization lines and conductive vias are isolated from each other by an air dielectric. The semiconductor device further includes a plurality of supporting stubs each of which is configured to form a supporting column that extends through the plurality of interconnect levels of the semiconductor device.

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